

'growth' and to have undergone some marvellous rearrangements of the particles while in the solid condition. So far as he knew, no one had previously attempted to classify the different patterns, nor had anyone, except Mr. Wickham King, in his work on 'Permian Fossils,' offered any theory as to the formation of this cellular structure in the Magnesian Limestone.

The following communication was read:—

'On the Skull of a Chiru-like Antelope from the Ossiferous Deposits of Hundes (Tibet).' By Richard Lydekker, Esq.

Twenty years ago the Author proposed the provisional name of *Pantholops hundesiensis* for an extinct species of antelope typified by an imperfect skull figured in Royle's 'Botany etc. of the Himalaya Mountains,' pl. iii, fig. 1. The specimen is in the Museum of the Geological Society, and an examination has confirmed the original determination. The skull, although of rather smaller dimensions, comes very close to that of the existing chiru (*Pantholops Hodgsoni*) of Tibet in general form of brain-case, in the strong ridges marking the upper limits of the temporal fossæ, and in the contour of the occipital surface. The horn-cores have the same highly elliptical cross-section, and the same general setting-on and upright direction. The fossil apparently came from the horizontal deposits of Hundes, and its age is probably not greater than Upper Pliocene.

#### MISCELLANEOUS.

*On Apus and Branchipus from Armenia.* By H. O. CAVALIER.

MR. FELIX OSWALD recently collected some specimens of *Apus cancriformis* and *Branchipus stagnalis* in some pools on the Bingöl Dag, in Armenia, at a height of 10,000 feet; they are now in the British Museum, where, through the kindness of Professor F. Jeffrey Bell, I have had an opportunity of examining them. It is interesting that the proportion of males is unusually large: of *Apus* there is one male and one female, of *Branchipus* two males and six females.

As Crustacea at such heights are rarely discovered, I think it worthy of record that these are practically identical with the common European species, though this is only in accordance with the results of Grube\* on *Apus* from Lake Baikal and of Gaerstaeker† on the Siberian *Branchipus*; but there are some slight differences in the appendages. When sufficient material has been collected a table of the variations of Crustacea at different altitudes may be of considerable interest.

\* Jahres-Bericht schl. Gesell. 1872, p. 53.

† Bronn, 'Crustacea,' p. 1062.

*Voluta Smithi*, new Name to replace that of *V. uniplicata* (pre-occupied). By G. B. SOWERBY, F.L.S.

Since the publication of the description of this remarkable Japanese species in the Ann. & Mag. Nat. Hist. ser. 7, vol. v. (May 1900), Mr. Edgar A. Smith has kindly pointed out to me that the name I applied to it—*Voluta uniplicata*—had been used as far back as 1850 by a member of my family, James de Carl Sowerby, for a fossil species from the Middle Eocene of Bracklesham Bay. It is therefore necessary to alter the name of the last published, which I now propose to call *V. Smithi*, in honour of the eminent conchologist who has so opportunely called my attention to the error, caused by inadvertance, and enabled me to rectify it.

*Dates of Publication of the Zoological and Botanical portions of some French Voyages.*—Part II. Ferret and Galinier's '*Voyage en Abyssinie*'; Lefebvre's '*Voyage en Abyssinie*'; '*Exploration scientifique de l'Algérie*'; Castelnau's '*Amérique du Sud*'; Dumont d'Urville's '*Voyage de l'Astrolabe*'; Laplace's '*Voyage sur la Favorite*'; Jacquemont's '*Voyage dans l'Inde*'; Tréhouart's '*Commission scientifique d'Islande*'; Cailliaud, '*Voyage à Méroé*'; '*Expédition scientifique de Morée*'; Fabre, '*Commission scientifique du Nord*'; Du Petit-Thouars, '*Voyage de la Vénus*'; and on the Dates of the '*Faune Française*.' By C. DAVIES SHERBORN, F.Z.S., and B. B. WOODWARD, F.L.S. &c.

'*Voyage en Abyssinie, dans les Provinces du Tigré, du Samen et de l'Amhara . . . par MM. FERRET et GALINIER.*' [1839-43.]

Vol. III. Descript. géologique &c.  
 Catal. des Roches, &c. By Rivière.  
 Plantes. By Raffeneau Delile.  
 Mammifères. By F. E. Guérin-Méneville.  
 Oiseaux. By Guérin-M. & De La Fresnaie.  
 Entomologie. By Reiche.

The first portion of vol. iii. appeared in 1847; this we consider to be up to p. 84 (the geology); the plants, mammals, and part of the birds (up to p. 224) we consider to date from 1848; p. 227 refers to 1847, pp. 229 and 231 refer to Lefebvre's '*Voyage en Abyssinie*,' p. 110 (=1847), and p. 256 bears a date 1850: it is therefore reasonable to accept 1850 (not Hagen's 1849) as the date of pp. 225-536. See also Wiegmann. Arch. 1851, ii. 153. Guérin, in the "*Insectes*" of Lefebvre's '*Voy. en Abyss.*' says on p. 254 that Reiche's specific names quoted in this (Guérin's) work were still in MS. on 30 Aug. 1846.

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‘ Voyage en Abyssinie exécuté pendant . . . 1839-43 . . . par une Commission scientifique composée, &c.’ (Lefebvre’s).

Pt. III. Tom. IV. & V. Hist. Nat., Botanique. Par Richard.

Tom. IV. 16 $\frac{3}{4}$  sheets=pp. i-xi, 1-254. Bibl. Franç. 22. v. **1847**; the 1846 of Wieg. Arch. 1847, ii. 296, would seem to be an error.

3 = 255-304. Bibl. Franç. 15. i. **1848**.

12 $\frac{1}{2}$  = 305-end. Bibl. Franç. 26. ii. **1848**.

Tom. V. There is no clue to t. v. Pritzel says 1850, Jackson says 1851. The T.P. and wrapper give no date; the last p. of the wrapper says the work came out in 12 livraisons of text=6 vols. Perhaps both Pritzel and Jackson are right, and the first half came out in 1850 and the second in 1851.

Pt. IV. Tom. VI. Hist. Nat., Zoologie.

Mammals and Birds, by Des Murs & Prévost; Reptiles and Fishes by Guichenot; Insects, by Guérin-Ménéville.

Tom. vi. was begun in **1847** (‘ Appendice aux Mammifères, &c.’), and we consider pp. 1-174 to belong to that date. The ‘ Appendice ’ refers to 1848 on the second page, to June 1848 on p. 175\*; the text to the fishes, pp. 223-228, had not appeared in 1850 (Wieg. Arch. 1851, ii. 76), while that of the reptiles was noticed, with a doubt about the date, in 1852 (Wieg. Arch. 1853, ii. 61). The Entomologie came out in **1849** (Wieg. Arch. 1850, ii. 149). Ferret and Galinier, in their Voy. en Abyssinie, Oiseaux, p. 256, refer to the Oiseaux of this Voyage as 1850. It will be noticed that ‘ Appendice aux Mammifères, &c.’ (2 pp.), pp. 161\*-176\*, 177-192, 177\*-192\*, are all printed in smaller type and crowded up. This strongly suggests that these pages had been delayed, and space left for them, which proving insufficient, led to this singular muddle in the pagination. We regard these pages as **1851**. The summary is therefore:—

Pp. 1-174. **1847**.

Appendice, 2 pp.+161\*-176\*, 177-192, & 177\*-182\*. **1850**.

Pp. 183\*-192\* & 193-238 [-40]. **1851**.

Pp. 241-398. **1849**.

‘ Exploration scientifique de l’Algérie, pendant . . . 1840-42, &c.’

BOTANIQUE. I. Cryptogamie. By Durieu de Maisonneuve, &c.

Livr. 1-6, pp. 1-240, 36 pls. **1846**. Wieg. Arch. 1847, ii. 453.

7-17, 241-410. ? **1849**, Avis de l’éditeur. (On pp. 294 & 336 the year 1847 is quoted.)

18-20, 411-631. **1869**. Bibl. Franç. 23 Oct. 1869.

II. Phanérogamie. 330 pp.

Sheets 1-15, pp. 1-120. **1855**.

16-30, 121-240. **1856**.

31-end, 241-end & i-ex. **1868**. Bibl. Franç. 25 Jan. 1868.

“ Avis de l’éditeur.—Les Feuilles 1-15, formant la première livraison de ce volume, ont été imprimées d’octobre 1854 à avril 1855.—Les feuilles 16-30, formant la seconde livraison, ont été imprimées d’avril à octobre 1855.—Les feuilles 31 et suivantes, ainsi que celles consacrées à l’introduction, ont été imprimées de janvier à octobre 1867.”

GÉOLOGIE. By RENOU. 118 pp. 6 pls. **1848.** Bull. Soc. géol. Fr. [2] vii. 1849, 15.

„ Descr. des Coq. foss. By Deshayes (? published).

ZOOLOGIE. Hist. Nat. des Mollusques. By Deshayes. xx, 609 pp. Atlas, 160, 4 pp., 155 pls.

Plates 9<sup>B</sup>, 38, 76, 88, 91, 120, 122, 127, 128, 129, 131, 132, 133, 136, 137, 138, 140, and 141 were not published (*vide* note by bookseller in copy in Natural History Museum). This portion appears to have been issued in livraisons, each containing 4 or 5 sheets of text and 6 plates. Its publication was suspended at the twenty-fifth livraison by the revolution of February 1848.

No definite clue is as yet obtainable as to the exact dates of issue of these livraisons or their contents. The following represents the state of our knowledge:—

Livr. 1.	5½ sheets.	1845.	Bibl. Fr. 6 Dec. 1845.
1-3.		1845.	
4-9.		1846.	} Wieg. Arch. 1847, ii. 372.
10-20.		?	
21-25.		1848.	Journ. de Conch. sér. iii. tom. xvi. 1876, 124; Rev. Mag. Zool. i. 1849, 628.

The articles on *Gastrochæna* (p. 17 *et seqq.*) and on *Teredo* could not have appeared till 1846, having been read before the Paris Academy and then withdrawn in January of that year for the purposes of this work (Compt. Rend. Acad. Sci. Paris, xxii. 301).

Page 281 is post Nov. 1846, since allusion is there made to a paper of that date (then recently published) by Récluz in Rev. Zool. ix. pp. 424-5.

ZOOLOGIE. Hist. Nat. Anim. Articulés. By Lucas. Pts. 1-3; 403, 590, & 527 pp.

Livr. 1-18.	{ pp. 1-403 1-360 }	<b>1846.</b>	Wieg. Arch. 1847, ii. 70, 118, 196, 202.
			[Livr. 1, 5 sheets, Bibl. Franç. 28, iii. 1846; 5 & 6, 10 sheets, <i>ibid.</i> 15, viii. 1846.]

361-376. **1847.** Bibl. Franç. 20 Nov. 1847.

“La seconde partie . . . il n'a encore paru que 56 feuilles” (*i. e.* to p. 448), Rev. Zool. 1847 (Nov.), 372; a few spp. came out in **1848**, but there is no record. Wieg. Arch. 1849, p. 121.

“Schluss des zweiten Bandes und der Dritte.” **1849.** Wieg. Arch. 1850, ii. 149, 185, & 242.

The Entom. Soc. France received livraisons 1-12 (in 4to, 1845-1847) in April 1847, livr. 13-18 in Dec. 1847; Lucas told the Society on 13th June, 1847, that he had finished the three volumes. This, however, does not help us any further.

Hist. Nat. des Reptiles. By Guichenot. Livr. 32. **1850.** Wieg. Arch. 1851, ii. 68.

Hist. Nat. des Poissons. By Guichenot. Livr. 37. **1850.** Wieg. Arch. 1851, ii. 76.

Hist. Nat. des Oiseaux. By Loche. 2 vols. **1867.** 309 & 444 pp. 13 pls. by Vaillant, and 1 bis, 9 bis by Werner.

Hist. Nat. des Mammifères. By Loche. **1867.** 123 pp. Pls. 1-5 by Vaillant, 6 & 7 by Werner.

The description of the Mammals and Birds was evidently entrusted in the first instance to M. le Commandant (afterwards Général) Jean Levaillant (cited in Loche's text as “Levaillant j<sup>or</sup>”), under whose directions the plates, some of which bore new specific

names, were drawn. Some of these plates were issued as early as 1849, being cited in Bonaparte's 'Conspectus Avium,' but no portion of text by Levaillant ever appeared, the first allusion to the new species being in V. Loche's 'Catalogue des Mammifères et des Oiseaux observés en Algérie,' 1858.

FRANCIS DE CASTELNAU. 'Expédition dans les parties centrales de l'Amérique du Sud, &c.'

ZOOLOGIE.

Vols. I. and II. came out in 20 livraisons, the contents of which are printed in the "Table et classification des matières" affixed to each volume. The dates on which the livraisons were received by the Académie Française were:—

Livr.	1-3.	23 July 1855.	Compt. Rend. tom. xli. p. 129.
	4-7.	10 Sept. 1855.	" " p. 447.
	8-11.	3 Dec. 1855.	" " p. 1027.
	12-14.	17 Dec. 1855.	" " p. 1094.
	15-18.	30 June, 1856.	" tom. xlii. p. 1275.
	19-20.	8 Dec. 1856.	" tom. xliii. p. 1133.

Vol. III. Entomologie. By Lucas. 204 pp. 1859.

Myriapodes, &c. By Gervais. 44 pp. 1859.

Mollusques, &c. By Hupé. 104 pp. 1857.

Livr.	21-25.	30 Nov. 1857.	Compt. Rend. tom. xlv. p. 936.
	26-28.	7 Mar. 1859.	" tom. xlviii. p. 483.
	29-30.	10 Oct. 1859.	" tom. xlix. p. 516.

Livr. 21-24 contained the Mollusques (12 sheets and 20 pls.), Wieg. Arch. 1858, ii. 493, and appeared in 1857. Myriapodes was published in 1859, Wieg. Arch. 1859, ii. 509; Entomologie in 1859, Wieg. Arch. 1859, ii. 329.

BOTANIQUE. By H. A. Weddell.

Vol. I., livr. 1, pp.	1-24.	16 July, 1855.	Compt. Rend. tom. xli. p. 108.
	2,	25-56. 3 Dec. 1855.	" " p. 1027.
	3,	57-136. 30 June, 1856.	" tom. xlii. p. 1275.
	4-6,	137-184. 15 Dec. 1856.	" tom. xliii. p. 1134.
	7,	185-232. 30 Nov. 1857.	" tom. xlv. p. 936.
Vol. II.,	8,	1-16. 1 Feb. 1858.	" tom. xlvi. p. 261.
	9,	17-72. 7 Mar. 1859.	" tom. xlviii. p. 483.
	10 & 11,	73-112. 10 Oct. 1859.	" tom. xlix. p. 516.
	12 & 13,	113-192. 12 Nov. 1860.	" tom. li. p. 733.
	14,	193-224. }	tom. liv. p. 238.
	15,	225-272. }	
	16,	273-316. }	

From. livr. 1-13 the date of reception by the Academy may be taken as correct; livr. 14 we regard as Apr. 1861, livr. 15 as Oct. 1861, and livr. 16 as Nov. 1861.

[To be continued.]

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